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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,848	10/22/2003	Edward Tygard	1054	4220
27649	7590	11/10/2008		
MICHAEL TOBIAS 1629 K ST NW SUITE 300 WASHINGTON, DC 20006			EXAMINER KEENAN, JAMES W	
			ART UNIT 3652	PAPER NUMBER
			MAIL DATE 11/10/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/689,848

Applicant(s)

TYGARD, EDWARD

Examiner

James Keenan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 62-64, 75, 76, 83, 85 and 90-107 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 83 is/are allowed.
- 6) ☒ Claim(s) 62, 63, 85, 90, 91, 93, 95-102 and 107 is/are rejected.
- 7) ☒ Claim(s) 64, 75, 76, 92, 94 and 103-106 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 62, 63, 85, 90, 91, 93, 95-102, and 107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tygard (US 5,516,255) in view of Pierre (US 3,044,819), both previously cited.

As noted in previous Office actions, Tygard shows a clamping apparatus for grasping a rectangular layer of articles on a pallet from four sides and lifting the layer, comprising four clamping arms mounted on a frame for pivoting about a single degree of freedom to grasp the rectangular load from four sides, wherein each clamping arm includes a contact portion for contacting the load, a lever portion pivotally connected to the frame and the contact portion, and a drive mechanism for pivoting the clamping arm with respect to the frame.

Although Tygard shows the clamping arms able to adjust to different sized loads (see figs. 3B, 3C), it does not utilize a four-bar linkage which controls an angle of the contact portion with respect to the vertical as the clamping arm pivots.

Pierre shows a clamping apparatus comprising frame 17 to which four clamping arms are pivotally mounted, each arm including a contact portion 1-4 for contacting a side of the load to be lifted, wherein each of the clamping arms defines a parallel four bar linkage comprised of a lever portion 10, 12, 14, 16 and a control rod 9, 11, 13, 15

both respectively pivoted to the frame and the contact portion, so that the contact portions of the clamping arms maintain a constant angle with respect to vertical as the clamping arms are pivoted relative to the frame by the drive mechanisms. This allows the arms to pick up layers of articles of varying size (see col. 1, lines 27-39, col. 3, lines 43-48).

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the apparatus of Tygard such that it utilized a four-bar linkage to control the angle of the contact portion of each clamping arm, as shown by Pierre, as this would be a more effective means of maintaining the arms at a constant angle and thus enabling the clamping arms to properly pick up loads of varying size.

Re claims 85, 90, and 91, Tygard teaches the method steps as claimed.

Re claim 93, each contact portion has "a substantially planar surface ... extending between an upper and a lower edge" (emphasis added) thereof, as broadly claimed.

Re claim 95, based on the size of the apparatus, the contact portions of the arms are inherently considered "capable of being spaced from each other by at least 28 inches", as broadly and functionally claimed.

Similarly, re claims 96-102, the separation distance between the contact portions can clearly change by the various dimensions without the angle of the contact portion with respect to vertical changing by more than the various angles.

Re claim 107, when applied to the modified Tygard apparatus, a plane containing the lower axes of pivoting of the lever portion and control arm of the four bar linkage

would obviously pass through a region of the contact portion which contacts a side of the layer to be lifted, as Tygard already teaches the desirability of the pivot axis 43 being so arranged in the fig. 3A-B embodiment.

3. Applicant's arguments filed 7/21/08 have been fully considered but they are not persuasive.

Applicant argues that Pierre teaches a device for picking up a load wherein the load is supported by hook-like portions underneath the load, and the vertical surfaces which contact the load do not support the load. This is not persuasive. First, nothing in the claims precludes having a portion of the clamping device supporting the load from underneath; they do not require the contact portion to be the sole means of support. Furthermore, whether or not the vertical portions of Pierre's lifting apparatus could support Pierre's load solely on the sides is immaterial. Pierre is used only to modify Tygard's lifting apparatus, which already shows supporting the load with only the contact portions on the side. The modification has nothing to do with picking up Pierre's load. Finally, the argument that Tygard does not teach a desire to maintain the panels at a constant angle as the arms pivot is similarly unpersuasive. Tygard desires to be able to adjust the panels to different sizes of loads. A four bar linkage, as shown by Pierre, is a more effective means of doing so. A four bar linkage keeps the panels vertical as the arms pivot. However, it is not the fact that the panels maintain verticality at all positions of the arms that suggests the use of a four bar linkage, but rather that a four bar linkage is a way of ensuring that the panels are vertical **when they contact the**

load, regardless of load size. In other words, the ability to adjust to different sizes of loads is the reason one would be motivated to use a four bar linkage. Maintaining a constant angle is a feature of a four bar linkage that is a more effective means of adjusting to different sizes of loads than Tygard's single pivot device.

4. Applicant's arguments with respect to claims 92 and 103 have been fully considered and are persuasive. The rejection of these claims has been withdrawn.

5. The declaration under 37 CFR 1.132 filed 7/21/08 is insufficient to overcome the rejection of claims 62, 63, 85, 90-93, and 95-102 based upon Tygard in view of Pierre, as set forth in the last Office action because: it still fails to sufficiently provide a direct nexus between the invention and the claims of the application. While the affidavit does go into yet more details than the previous declarations concerning the structure of the invention, it still fails to indicate exactly what elements the invention as sold consisted of as compared to the individual claims set forth in the application. For example, in "mapping" claims 62, 95, and 96 on pages 21-23 of the arguments (in support of attachment C of the most recent declaration), applicant asserts that lever portion 13, control rod 14, outer end of frame 11 (note; not labeled) and lug 17 define a four-bar linkage. However, it is unclear from this attachment how these elements could reasonably be construed as a four-bar linkage. Elements 13 and 14 are not visible in the side views of arms 12 (which is the only view in which a four-bar linkage potentially could be shown), element 11 is not even labeled, and it is unclear exactly what element

label 17 is portraying. Thus, there is no showing that the objective evidence of nonobviousness is commensurate in scope with the claims. It is also again noted that while the declaration focuses on the soft drink, beer, and grocery industries, the claims are not so limiting (except for a couple of dependent claims). Therefore, the commercial success could be attributed to factors such as a lack of appreciation for the marketability of such a device in these particular industries rather than the lack of the technical knowledge necessary to construct the device. Applicant's single example of a beer case clamp is unpersuasive. Furthermore, as noted previously, while the improved sales figures are reasonably impressive, they are not considered overly persuasive, and could be attributed to simply the "newness" factor of a product which generally results in increased sales, especially since sales have shown only modest gains since the initial introduction of the new product in 2003. In fact, the percentage increase in sales of the old product from 2000-2002 is actually greater than the percentage increase in sales of the new product from 2003-2006, and the percentage of sales to the beer and grocery industries of both products covers substantially the same range. While applicant refutes that "newness" had anything to do with the sales, in that the new product was similar in appearance to the old product, certainly anyone familiar with the industry or otherwise associated with purchasing these types of clamping devices would have recognized that this was a new product (and most likely applicant marketed/advertised it as such). While applicant may argue that little advertising and marketing was performed, it is unlikely in such a limited market (i.e., 3-5 sales per month) that very much advertising would be necessary. One or two ads in a trade magazine and virtually anyone with an interest a

this type of product would probably know about it. It is also noted that applicant seems to have misinterpreted the examiner's use of the term "newness". The examiner did not mean for this to imply the product was faddish or a fashion statement, but simply that in such a small market, a new product would likely be widely known and readily accepted without an intensive advertising campaign. See MPEP § 716.03.

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

6. Claim 83 is allowed.
7. Claims 64, 75, 76, 92, 94, and 103-106 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Keenan whose telephone number is 571-272-6925. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saul Rodriguez can be reached on 571-272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/James Keenan/
Primary Examiner
Art Unit 3652

jwk
11/04/08